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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/621,341	07/21/2000	Keiji Enpuku	017348/0361	3693

7590

04/10/2002

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EXAMINER

DO, PENSEE T

ART UNIT

PAPER NUMBER

1641

DATE MAILED: 04/10/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/621,341

Applicant(s)

ENPUKU, KEIJI

Examiner

Pensee T. Do

Art Unit

1641

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 5-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election with traverse of group I, claims 1-4, in Paper No. 5 is acknowledged. However, the applicant never sets forth any grounds of traversal.

The requirement is still deemed proper and is therefore made FINAL.

### ***Specification***

The abstract of the disclosure is objected to because it contains more than one paragraph. Correction is required. See MPEP § 608.01(b).

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1 and 3, please spell out "SQUID" for abbreviation may have more than one meaning.

In claim 1, line 5, "the magnetic material label" lacks antecedent basis. Is "the magnetic material label" the same as "a magnetic label" or "the magnetized magnetic material label"? Please distinguish.

Claim 1 also recites "A SQUID which detect a magnetic field having right angle to the magnetic field" which is confusing. How many magnetic fields are there? Is the

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magnetic field having the right angle different from or the same as the second occurred "magnetic field"?.

Claim 1 also recites in (1) that the magnetic label is to "detect antigen-antibody reaction" which lacks antecedent basis. Furthermore, no antibody or antigen has been introduced in the claim.

Claim 2 is confusing in reciting "said magnetic field for magnetization". Which magnetic field? Besides, a magnetic field for "magnetization" has not been introduced.

Claim 3 is vague in reciting "detects variation of the magnetic field". Variation of the magnetic field strength or what? "The magnetized magnetic material" lacks antecedent basis.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

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Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by Weitschies et al. (US 6,027,946).

Weitschies teaches a process for quantitative detection of analytes in liquid and solid phases by labeling an analyte of interest with colloidal ferromagnetic substances or magnetic labels (see col. 2, lines 60-65); magnetizing the magnetic labeled analytes; measuring analytes by using a SQUID (superconducting quantum interference device).(see col. 3, line 60-col. 4, line 2; col. 4, lines 18-36). A static magnetic field is a magnetic field that does not change and produced by a natural or synthetic magnet. A SQUID device has a magnet to impose a magnetic field. Thus, the magnetic field of Weitchies applies to the static magnetic field of the present invention. When a magnetic field is applied, the magnet is pulling the magnetic material. Magnetic fields have parallel lines of force so the analyte that is labeled with magnetic material will move parallel to the magnetic field.

Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by Nippon Telegraph & Telephone Corp (NTT for short) (JP63090765A).

NTT teaches a SQUID immunoassay wherein one antigen or antibody is labeled with magnetic particles to form a magnetic labeled body, and the labeled body and a sample are subjected to antigen-antibody reaction. After the antibody-antigen reaction, magnetic labeled bodies that have not reacted are removed from the sample by a magnetic field. The magnetization of the sample is measured with a superconductive fluxoid quantum interferometer (SQUID). A static magnetic field is a magnetic field which does not change and produced by a natural or synthetic magnet. A SQUID device

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has a magnet to impose a magnetic field. Thus, the magnetic field of Weitchies applies to the static magnetic field of the present invention. A static magnetic field is a magnetic field that does not change and produced by a natural or synthetic magnet. A SQUID device has a magnet to impose a magnetic field. Thus, the magnetic field of Weitchies applies to the static magnetic field of the present invention. A static magnetic field is a magnetic field that does not change and produced by a natural or synthetic magnet. A SQUID device has a magnet to impose a magnetic field. Thus, the magnetic field of Weitchies applies to the static magnetic field of the present invention. When a magnetic field is applied, the magnet is pulling the magnetic material. Magnetic fields have parallel lines of force so the analyte that is labeled with magnetic material will move parallel to the magnetic field.

Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by Koch et al. (US 6,123,902).

Koch teaches a device for carrying a method comprising steps of labeling the sample with magnetic particles; magnetizing the labeled sample using permanent magnets; providing a device for moving the sample during the measurement phase of a detection device such as SQUID; detecting the magnetic fields using a SQUID. (See col. 3, lines 27-67; col. 4, lines 32-36). Permanent magnets are natural magnets and static magnetic fields are produced by natural or artificial magnet. . When a magnetic field is applied, the magnet is pulling the magnetic material. Magnetic fields have parallel lines of force so the analyte that is labeled with magnetic material will move parallel to the magnetic field.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pensee T. Do whose telephone number is 703-308-4398. The examiner can normally be reached on Monday-Friday, 7:00-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le can be reached on 703-305-3399. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-4242 for regular communications and 703-746-5291 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.



CHRISTOPHER L. CHIN  
PRIMARY EXAMINER  
GROUP 1800 1641

Pensee T. Do  
Patent Examiner  
April 8, 2002